

Amendments to the Specification:

Please replace the paragraph at beginning at page 4, line 29 with the following amended paragraph:

NOCC is a derivative of chitin, which is found in the shells of crustaceans and many insects. Chitin and its derivatives are normally biocompatible, naturally resorbed by the body, and have previously been suggested for use for sustained drug release, bone induction and hemostasis (Chandy and Sharma, *Biomat. Art. Cells & Immob. Biotech.* 19:745-760 (1991); Klokkevold, P. *et al.*, *J. Oral Maxillofac. Sur.* 50:41-45 (1992)). Due to its prevalence, chitin may be obtained relatively cheaply, largely from waste products. One of the most useful of the chitin derivatives is NOCC. As disclosed in U.S. Pat. No. 4,619,995, issued to Hayes, ~~the entire contents of which are hereby incorporated by reference,~~ NOCC has carboxymethyl substituents on some of both the amino and primary hydroxyl sites of the glucosamine units of the chitosan structure. NOCC may be used in an uncrosslinked form as a solution or may be cross-linked or complexed into a stable gel. Because of its advantageous physical properties, and its relative low cost, NOCC presents advantageous properties for use in site localized delivery systems.

Please replace the paragraph at beginning at page 6, line 13 with the following amended paragraph:

The bioadhesive strength of several adherent NOCCs was compared to that of polycarbophil, a cross-linked acrylic acid polymer available from B.F. Goodrich. As more fully described in Example 1, solutions of low and high viscosity NOCC were prepared, as well as hydrogels of high viscosity NOCC. The bioadhesive was applied to stomach and cecal tissue samples and the bioadhesive strength was measured according to a modified version of the procedure disclosed in U.S. Pat. No. 4,615,697, ~~the disclosure of which is hereby incorporated by reference.~~ The transfer of polymer to both tissue surfaces indicated that the adhesive force of the polymer exceeded the cohesive force. A summary of results appears in Tables 1 and 2, and Figure 2. In preferred embodiments, the bioadhesive strength of adhesive NOCC coatings of the invention is

desirably greater than at least about 1000 dynes/cm², more preferably greater than at least about 2000 dynes/cm², and most preferably greater than at least about 3000 dynes/cm².

Please replace the paragraph at beginning at page 9, line 17 with the following amended paragraph:

Another finding was that both the 2.5 % high viscosity NOCC solution and the 1% NOCC gel in citrate were more adhesive than its counterparts in PBS. Without limitation to the present invention, this difference may possibly be explained by the influence of the citric acid environment. At neutral pH, NOCC exists as an anionic species resulting from the presence of negatively charged carboxyl ate groups (-COO); the free amines on NOCC are primarily uncharged. By contrast, in acidic citrate buffer (pH 5.6) the amine groups are protonated to form positively charged ammonium sites (-NH₃⁺) that ionically bind citrate ions. Such salts are described in United States Patent No. 5,412,084, ~~the disclosure of which is incorporated herein by reference~~. Since citrate has three carboxylate groups, two of which are negatively-charged at pH 5.6, the net result is that NOCC in acidic citrate has an increased number of carboxylate groups associated with the polymer and, hence, displays an increased bioadhesiveness.